SAFETY DATA SHEET

1. Identification
Product identifier Marker, Ideal Mark & Jumbo Insta Mark
Other means of identification None.
Recommended use Printing Inks.
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information
Company name Diagraph MSP
Address 5307 Meadowland Parkway Marion IL 62959
Telephone 1-800-521-3047
E-mail msds@diagraphmsp.com
Contact person Customer Service
Emergency phone number Emergency telephone 800-535-5053 (US only)
+1-352-323-3500 international

2. Hazard(s) identification
Physical hazards Flammable liquids Category 3
Health hazards Acute toxicity, dermal Category 4
Acute toxicity, inhalation Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2
Carcinogenicity Category 2
Reproductive toxicity Category 2
Specific target organ toxicity, single exposure Category 3 respiratory tract irritation
Specific target organ toxicity, repeated exposure Category 2 (Central Nervous System, Kidney, Liver)
Aspiration hazard Category 1

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 2

OSHA defined hazards Not classified.

Label elements

Signal word Danger
Hazard statement Flammable liquid and vapor. May be fatal if swallowed and enters airways. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (Central Nervous System, Kidney, Liver) through prolonged or repeated exposure. Toxic to aquatic life.

Precautionary statement Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

Storage
Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
None known.

Supplemental information
None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>50-80</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>10-20</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>0-11.5</td>
</tr>
<tr>
<td>Cumene</td>
<td>98-82-8</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Benzene</td>
<td>71-43-2</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

Other components below reportable levels 12.79

Composition comments
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact
Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion
Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn’t get into the lungs.

Most important symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information
Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
**Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

Flammable liquid and vapor.

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**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions**

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

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**7. Handling and storage**

**Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Maintain storage temperatures between 35°F to 120°F (2°C to 49°C). Store away from incompatible materials (see Section 10 of the SDS).

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**8. Exposure controls/personal protection**

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>PEL</td>
<td>3.5 mg/m³</td>
</tr>
<tr>
<td>Cumene (CAS 98-82-8)</td>
<td>PEL</td>
<td>245 mg/m³</td>
</tr>
<tr>
<td>Ethylbenzene (CAS 100-41-4)</td>
<td>PEL</td>
<td>435 mg/m³</td>
</tr>
<tr>
<td>Xylene (CAS 1330-20-7)</td>
<td>PEL</td>
<td>35 mg/m³</td>
</tr>
</tbody>
</table>

Marker, Ideal Mark & Jumbo Insta Mark  
929279 Version #: 01 Revision date: - Issue date: 12-August-2015  
SDS US 3 / 11
US. OSHA Table Z-2 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
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<th>Value</th>
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<tr>
<td>Toluene (CAS 108-88-3)</td>
<td>Ceiling</td>
<td>300 ppm</td>
</tr>
<tr>
<td>Toluene (CAS 108-88-3)</td>
<td>TWA</td>
<td>200 ppm</td>
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</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3.5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Cumene (CAS 98-82-8)</td>
<td>TWA</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene (CAS 100-41-4)</td>
<td>TWA</td>
<td>20 ppm</td>
<td></td>
</tr>
<tr>
<td>Toluene (CAS 108-88-3)</td>
<td>TWA</td>
<td>20 ppm</td>
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</tr>
<tr>
<td>Xylene (CAS 1330-20-7)</td>
<td>STEL</td>
<td>150 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>100 ppm</td>
<td></td>
</tr>
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</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Cumene (CAS 98-82-8)</td>
<td>TWA</td>
<td>245 mg/m³</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene (CAS 100-41-4)</td>
<td>STEL</td>
<td>545 mg/m³</td>
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<tr>
<td></td>
<td></td>
<td>125 ppm</td>
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</tr>
<tr>
<td></td>
<td>TWA</td>
<td>435 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 ppm</td>
<td></td>
</tr>
<tr>
<td>Toluene (CAS 108-88-3)</td>
<td>STEL</td>
<td>560 mg/m³</td>
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<tr>
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<td></td>
<td>150 ppm</td>
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</tr>
<tr>
<td></td>
<td>TWA</td>
<td>375 mg/m³</td>
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<td>100 ppm</td>
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<td>Xylene (CAS 1330-20-7)</td>
<td>STEL</td>
<td>655 mg/m³</td>
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<td></td>
<td></td>
<td>150 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>435 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 ppm</td>
<td></td>
</tr>
</tbody>
</table>

Biological limit values

ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene (CAS 100-41-4)</td>
<td>0.15 g/g</td>
<td>Sum of mandelic acid and phenylglyoxylic acid</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
<tr>
<td>Toluene (CAS 108-88-3)</td>
<td>0.3 mg/g</td>
<td>o-Cresol, with hydrolysis</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>0.03 mg/l</td>
<td>Toluene</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>0.02 mg/l</td>
<td>Toluene</td>
<td>Blood</td>
<td>*</td>
</tr>
<tr>
<td>Xylene (CAS 1330-20-7)</td>
<td>1.5 g/g</td>
<td>Methylhippuric acids</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Cumene (CAS 98-82-8) Can be absorbed through the skin.
Toluene (CAS 108-88-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Cumene (CAS 98-82-8) Skin designation applies.
Toluene (CAS 108-88-3) Skin designation applies.

US - Tennessee OELs: Skin designation
Cumene (CAS 98-82-8) Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards
Cumene (CAS 98-82-8) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
Cumene (CAS 98-82-8) Can be absorbed through the skin.

Appropriate engineering controls
Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment
Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection
Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Physical state Liquid.
Form Liquid.
Color According to product specification.

Odor Characteristic.

Odor threshold Not available.
pH Not available.
Melting point/freezing point Not available.
Initial boiling point and boiling range 276.8 °F (136 °C)

Flash point 78.8 °F (26.0 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) 1 % v/v
Explosive limit - upper (%) 7.8 % v/v

Vapor pressure 9.5 hPa (7 mm Hg)
Vapor density Not available.
Relative density Not available.

Solubility(ies)
Solubility (water) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.

Other information
Explosive properties Not explosive.
10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials

Hazardous decomposition products
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation
Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation.

Skin contact
Harmful in contact with skin. Causes skin irritation.

Eye contact
Causes serious eye irritation.

Ingestion
Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity
May be fatal if swallowed and enters airways. Harmful if inhaled. Harmful in contact with skin. May cause respiratory irritation.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumene (CAS 98-82-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>&gt; 3160 mg/kg, 24 Hours</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>Rat</td>
<td>8000 ppm, 4 Hours</td>
</tr>
<tr>
<td>LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>2910 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene (CAS 100-41-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>15400 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>Rat</td>
<td>17.4 mg/m³, 4 Hours</td>
</tr>
<tr>
<td>LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>35000 - 47000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toluene (CAS 108-88-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>14.1 ml/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>Rat</td>
<td>49000 mg/m³, 4 Hours</td>
</tr>
<tr>
<td>LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>636 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Test Results

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene (CAS 1330-20-7)</td>
<td>Oral LD50</td>
<td>3523 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td></td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
- Causes skin irritation.

**Serious eye damage/eye irritation**
- Causes serious eye irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**
  - Not a respiratory sensitizer.
- **Skin sensitization**
  - This product is not expected to cause skin sensitization.
- **Germ cell mutagenicity**
  - No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
- Suspected of causing cancer. Inhalation of carbon black dust may cause cancer, however due to the physical form of the product inhalation of dust is not relevant.

#### IARC Monographs. Overall Evaluation of Carcinogenicity
- Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.
- Cumene (CAS 98-82-8) 2B Possibly carcinogenic to humans.
- Ethylbenzene (CAS 100-41-4) 2B Possibly carcinogenic to humans.
- Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.
- Xylene (CAS 1330-20-7) 3 Not classifiable as to carcinogenicity to humans.

#### NTP Report on Carcinogens
- Cumene (CAS 98-82-8) Reasonably Anticipated to be a Human Carcinogen.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
- Not listed.

**Reproductive toxicity**
- Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging fertility or the unborn child.

**Specific target organ toxicity - single exposure**
- May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**
- May cause damage to organs (Central Nervous System, Kidney, Liver) through prolonged or repeated exposure.

**Aspiration hazard**
- May be fatal if swallowed and enters airways.

**Chronic effects**
- May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

### 12. Ecological information

**Ecotoxicity**
- Toxic to aquatic life.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumene (CAS 98-82-8)</td>
<td>Aquatic Fish LC50</td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss) 2.7 mg/l, 96 hours</td>
</tr>
<tr>
<td>Ethylbenzene (CAS 100-41-4)</td>
<td>Aquatic Acute Crustacea EC50</td>
<td>Water flea (Daphnia magna) 1.81 - 2.38 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish LC50</td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss) 4.2 mg/l, 96 hours</td>
</tr>
<tr>
<td>Toluene (CAS 108-88-3)</td>
<td>Aquatic Chronic Crustacea EC50</td>
<td>Ceriodaphnia dubia 3.6 mg/l, 7 days</td>
</tr>
<tr>
<td></td>
<td>Aquatic Fish EC50</td>
<td>Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish LC50</td>
<td>Pink salmon (Oncorhynchus gorbuscha) 6.86 - 8.48 mg/l, 96 hours</td>
</tr>
</tbody>
</table>
Components Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene (CAS 1330-20-7)</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss)</td>
</tr>
<tr>
<td></td>
<td>2.6 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)
- Ethylbenzene (CAS 100-41-4) 3.15
- Toluene (CAS 108-88-3) 2.73
- Xylene (CAS 1330-20-7) 3.2

Mobility in soil
No data available.

Other adverse effects
None known.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
- D001: Waste Flammable material with a flash point <140 F
- D018: Waste Benzene

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose off in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT
- UN number: UN1210
- UN proper shipping name: Printing ink, flammable
- Transport hazard class(es): 3
  - Subsidiary risk: -
  - Label(s): 3
- Packing group: III
- Environmental hazards: No
- Marine pollutant: No
- Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
- Special provisions: B1, IB3, T2, TP1
- Packaging exceptions: 150
- Packaging non bulk: 173
- Packaging bulk: 242

IATA
- UN number: UN1210
- UN proper shipping name: Printing ink flammable
- Transport hazard class(es): 3
  - Subsidiary risk: -
- Packing group: III
- Environmental hazards: Yes
- ERG Code: 3L
- Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

IMDG
- UN number: UN1210
UN proper shipping name: PRINTING INK flammable

Transport hazard class(es)

Class: 3
Subsidiary risk: -

Packing group: III

Environmental hazards
Marine pollutant: Yes
EmS: F-E, S-D

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.
Not established.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
- Cumene (CAS 98-82-8) - LISTED
- Ethylbenzene (CAS 100-41-4) - LISTED
- Toluene (CAS 108-88-3) - LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>50-80</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>10-20</td>
</tr>
<tr>
<td>Cumene</td>
<td>98-82-8</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
- Cumene (CAS 98-82-8)
- Ethylbenzene (CAS 100-41-4)
- Toluene (CAS 108-88-3)
- Xylene (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number
- Toluene (CAS 108-88-3) - 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
- Toluene (CAS 108-88-3) - 35 % WV
US state regulations

**US. Massachusetts RTK - Substance List**
- Carbon black (CAS 1333-86-4)
- Cumene (CAS 98-82-8)
- Ethylbenzene (CAS 100-41-4)
- Toluene (CAS 108-88-3)

**US. New Jersey Worker and Community Right-to-Know Act**
- Carbon black (CAS 1333-86-4)
- Cumene (CAS 98-82-8)
- Ethylbenzene (CAS 100-41-4)
- Toluene (CAS 108-88-3)
- Xylene (CAS 1330-20-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**
- Carbon black (CAS 1333-86-4)
- Cumene (CAS 98-82-8)
- Ethylbenzene (CAS 100-41-4)
- Toluene (CAS 108-88-3)
- Xylene (CAS 1330-20-7)

**US. Rhode Island RTK**
- Cumene (CAS 98-82-8)
- Ethylbenzene (CAS 100-41-4)
- Toluene (CAS 108-88-3)
- Xylene (CAS 1330-20-7)

**US. California Proposition 65**
WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**
- Benzene (CAS 71-43-2)
- Cumene (CAS 98-82-8)
- Ethylbenzene (CAS 100-41-4)
- Toluene (CAS 108-88-3)

**International Inventories**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
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</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

**Issue date**
12-August-2015

**Revision date**
-

**Version #**
01
HMIS® ratings

Health: 2*
Flammability: 3
Physical hazard: 0

NFPA ratings

Disclaimer

Diagraph MSP cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.